

FIG. 1

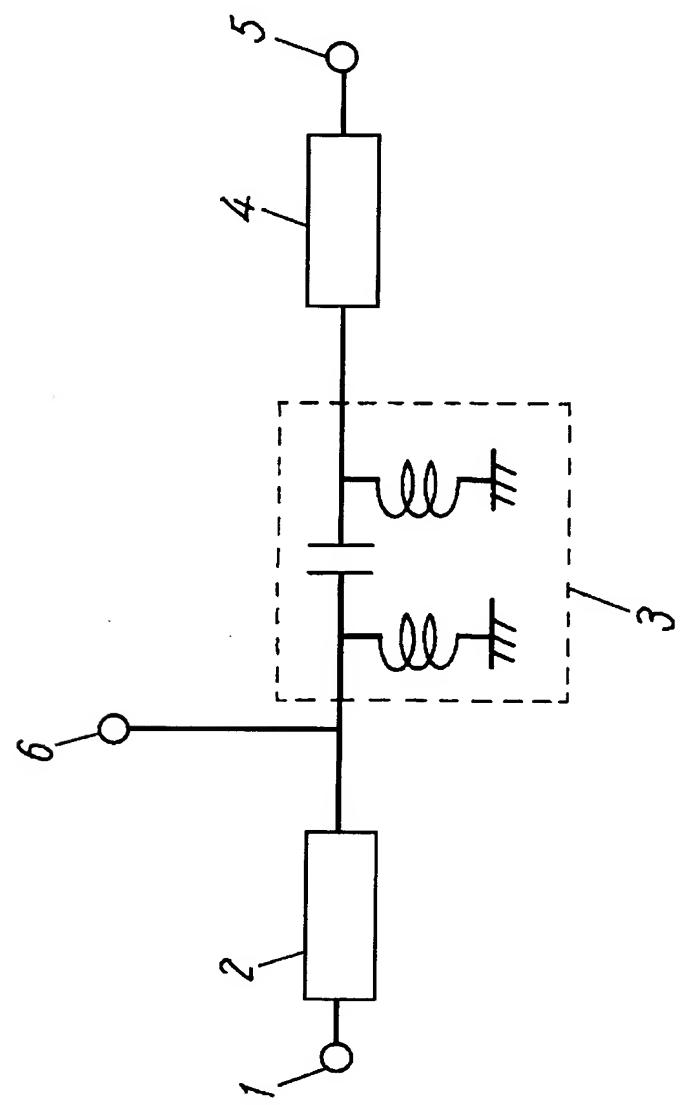


FIG. 2

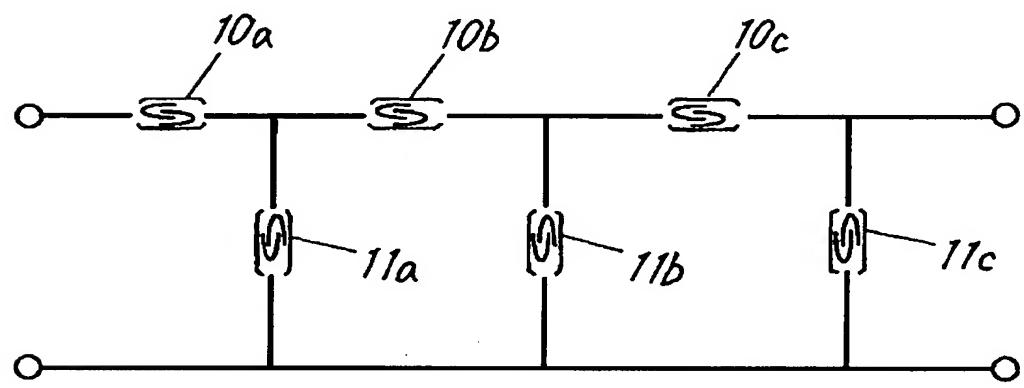


FIG. 3

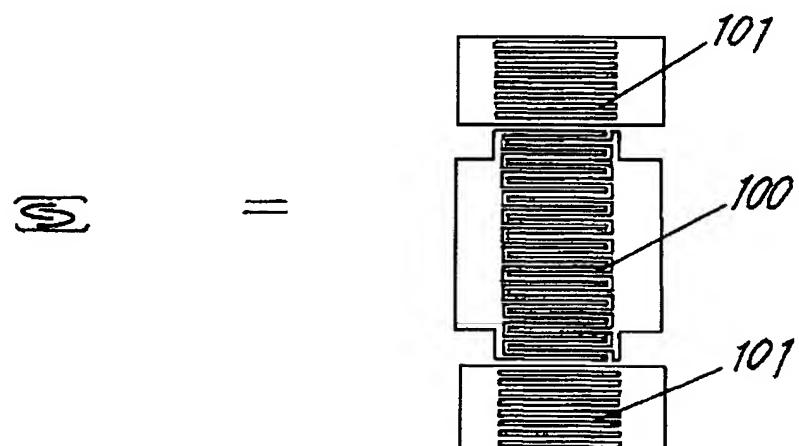
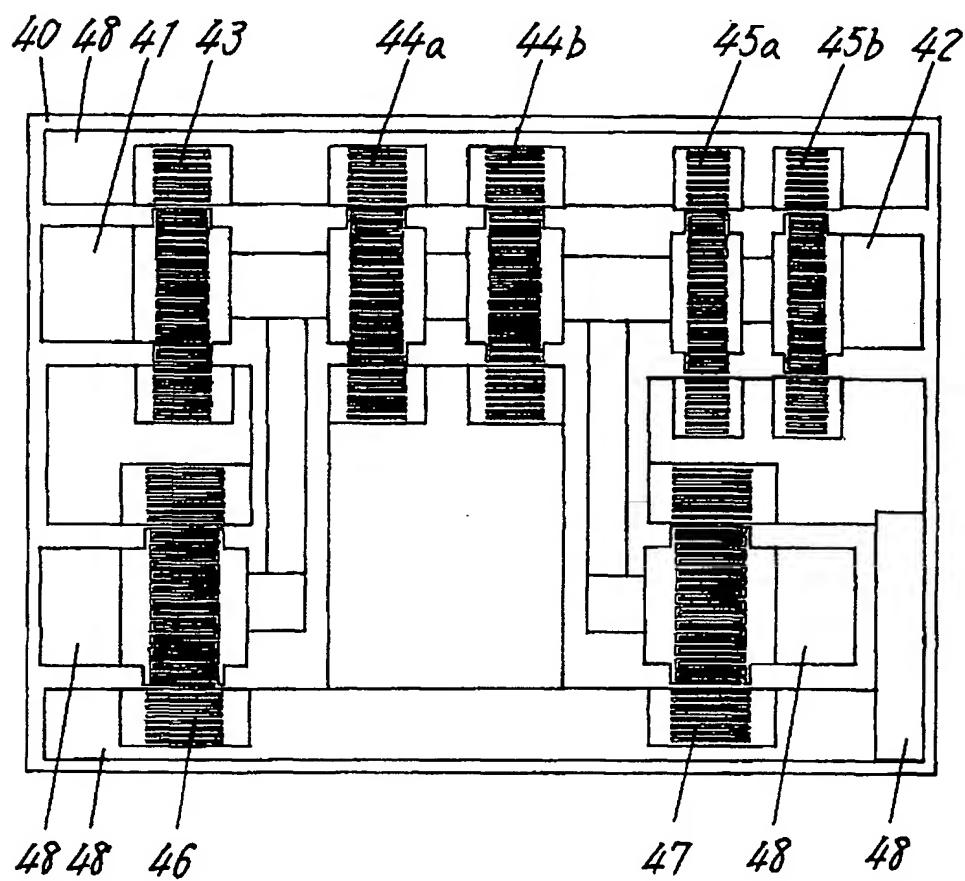
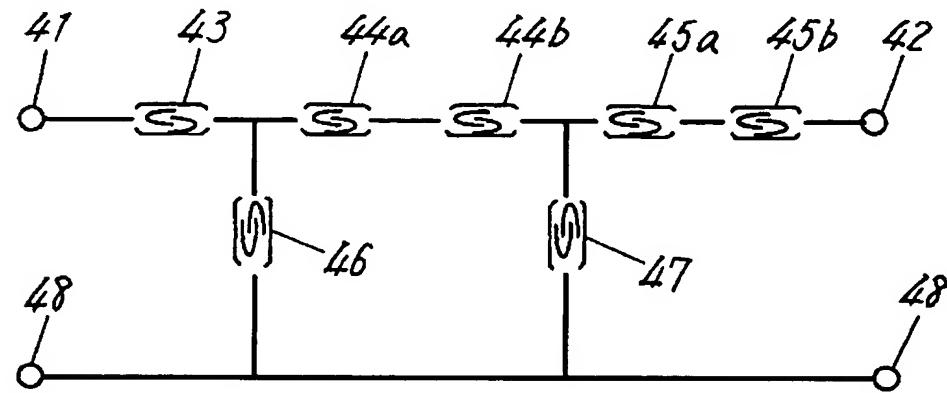


FIG. 4



40 48 41 43 44a 44b 45a 45b 42
47 48 48 46

FIG. 5



4,666,375 - 6,264,842

FIG. 6

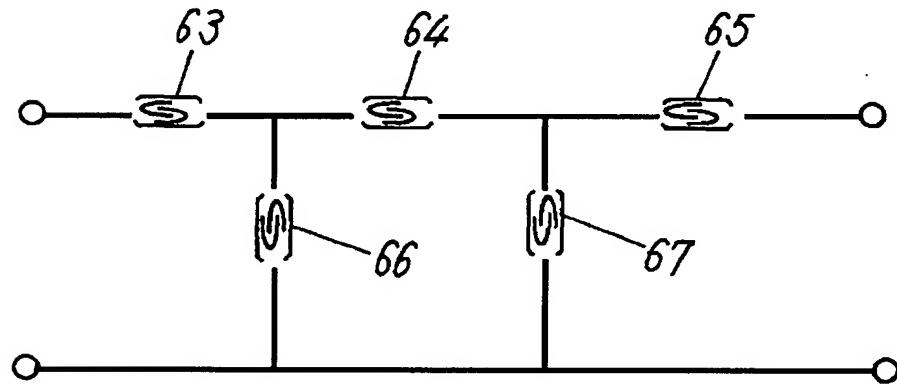


FIG. 7

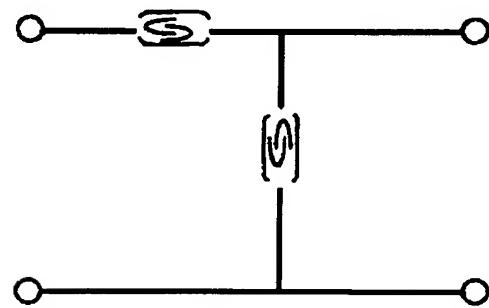


FIG. 8

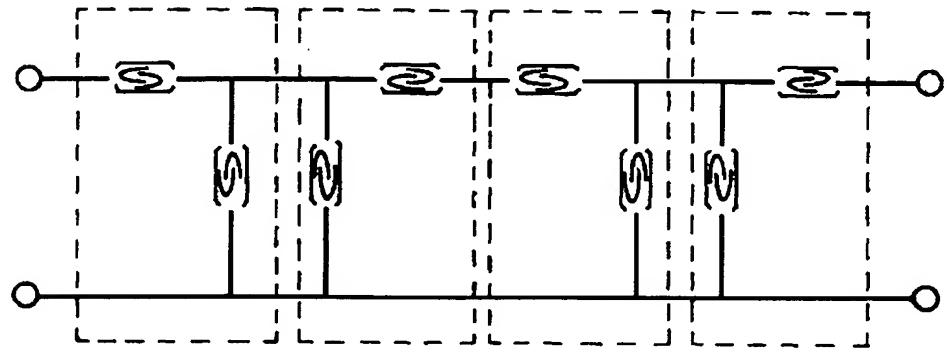


FIG. 9

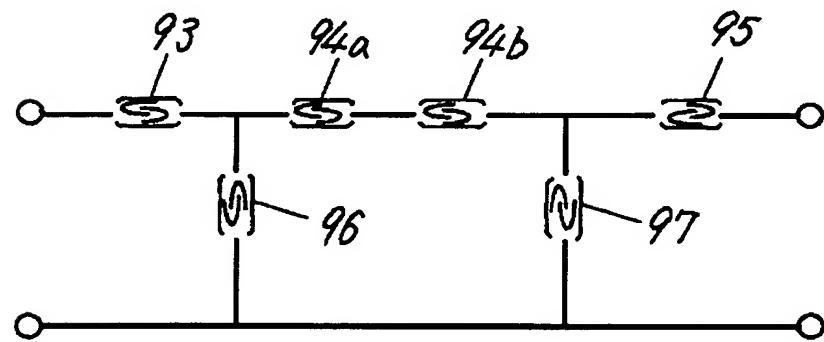


FIG. 10

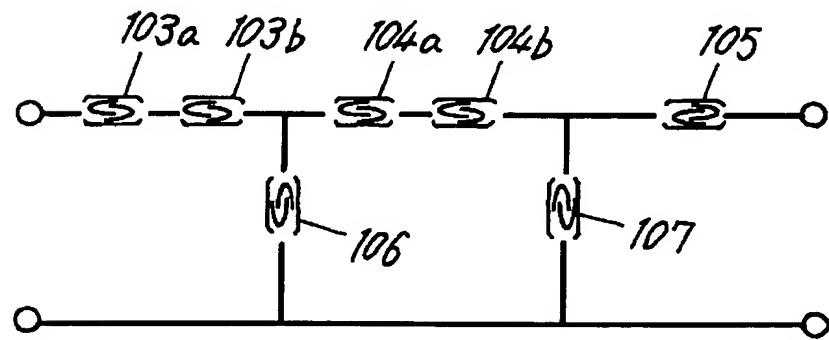


FIG. 11

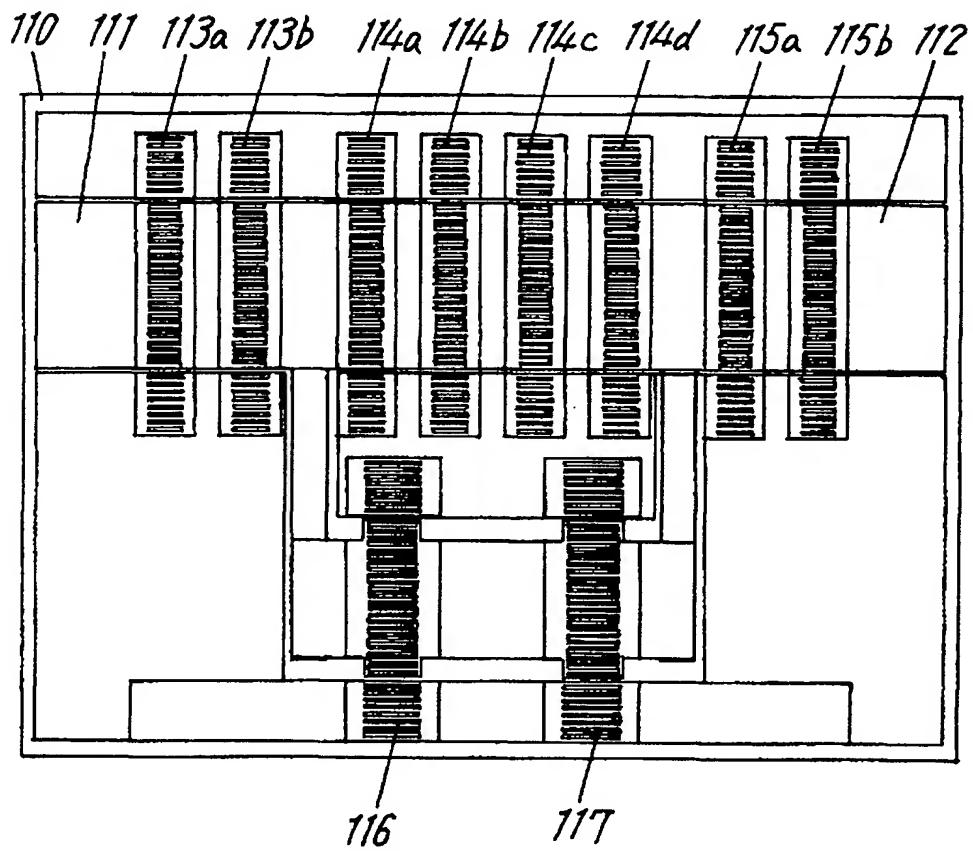


FIG. 12

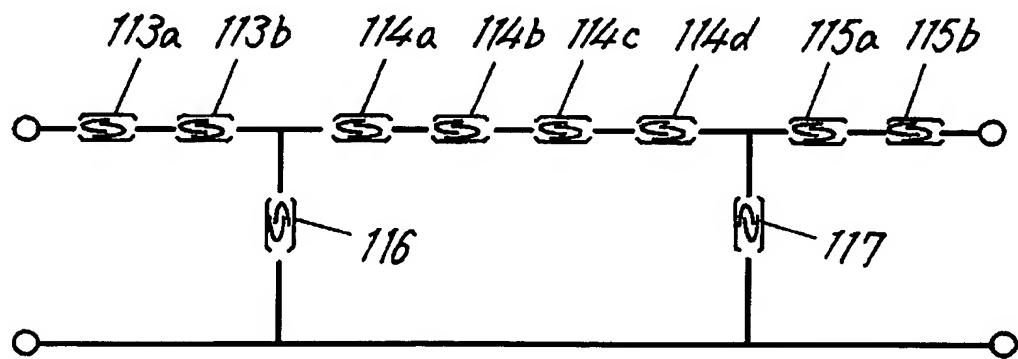


FIG. 13

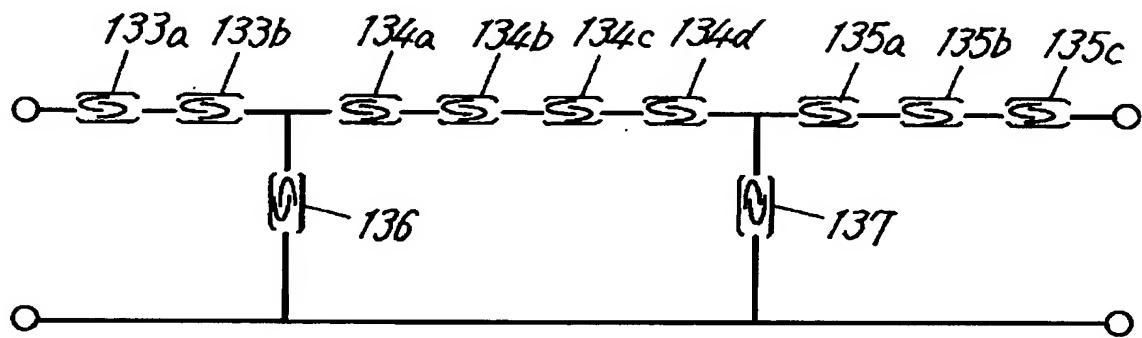


FIG. 14

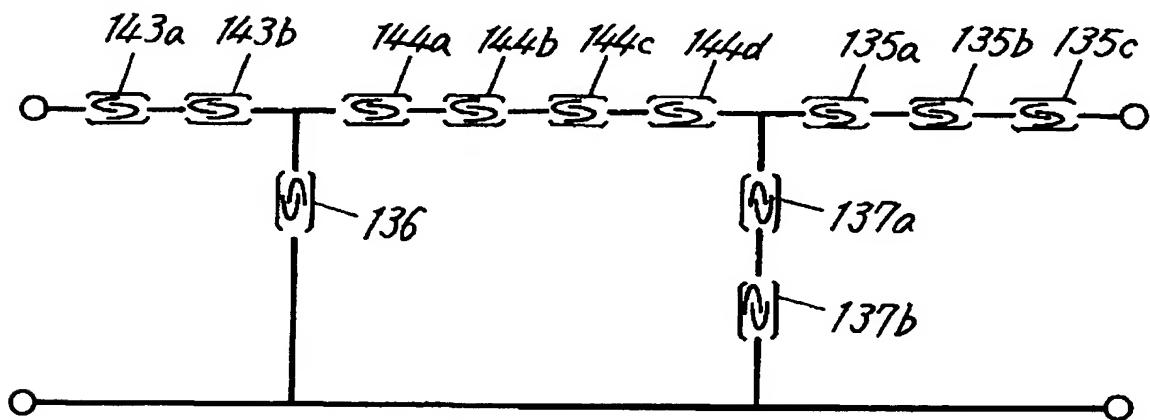


FIG. 15

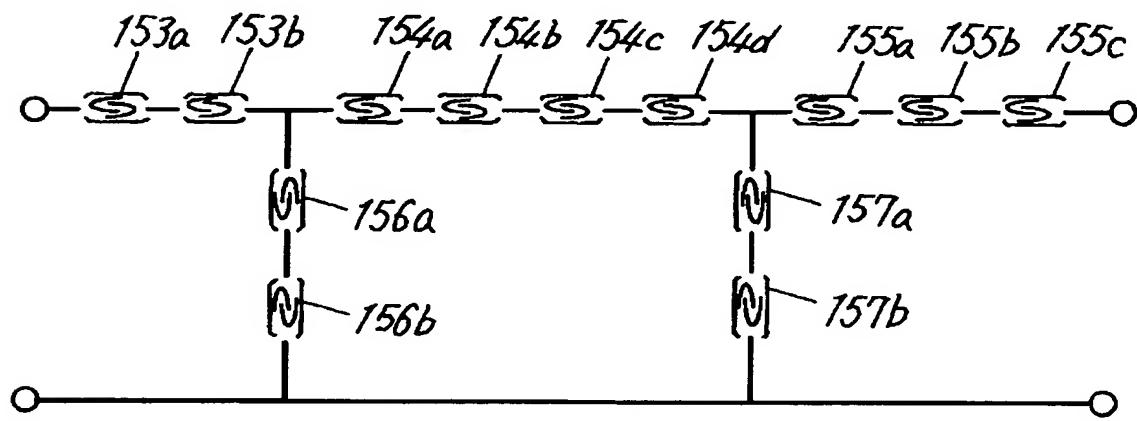


FIG. 16

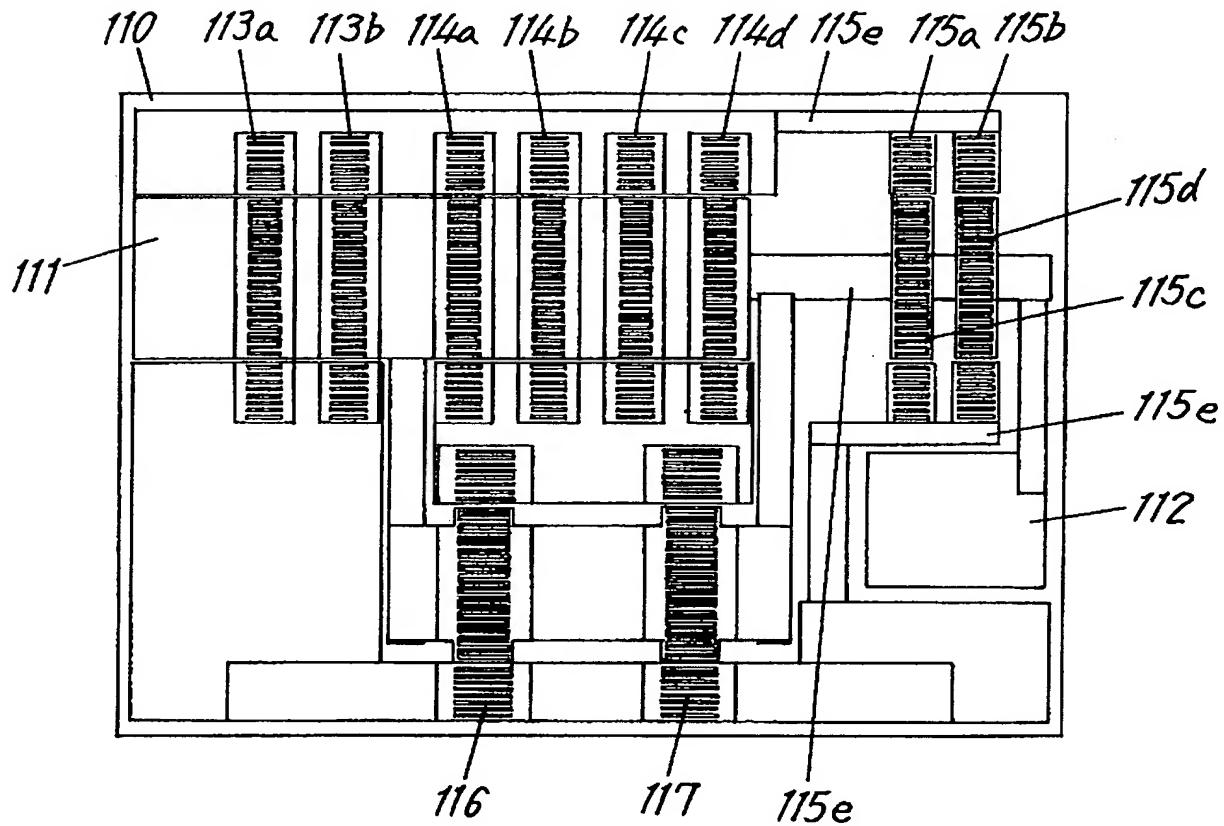


FIG. 17

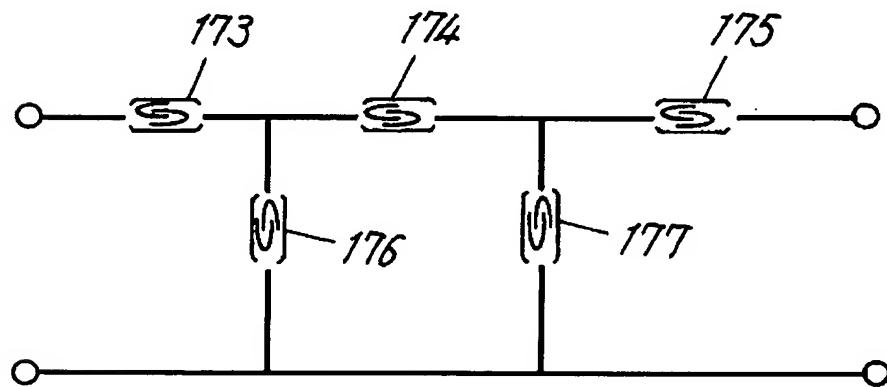


FIG. 18

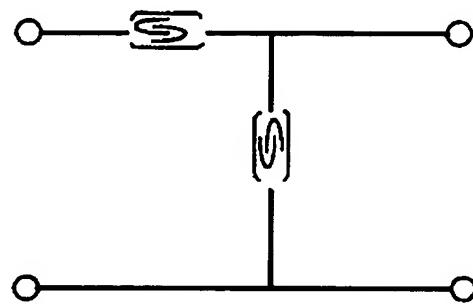


FIG. 19

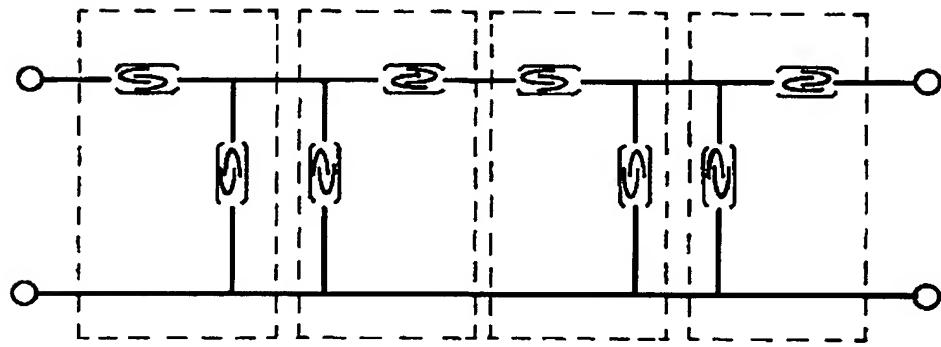
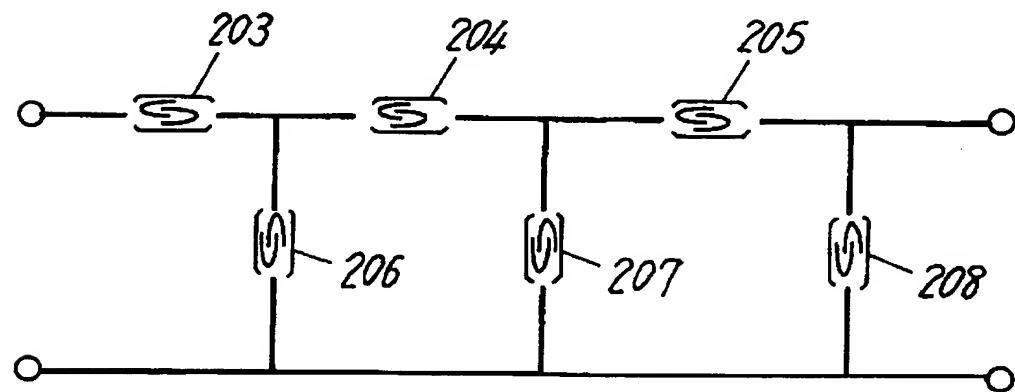


FIG. 20



4360657225 4350346622

FIG. 21

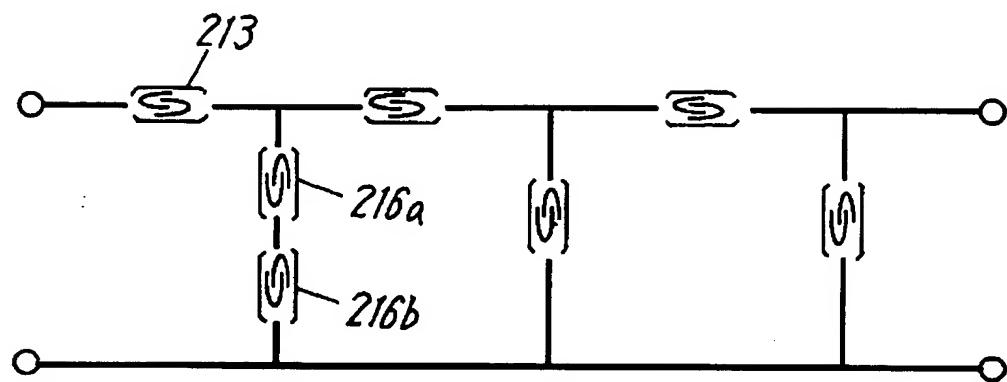


FIG. 22

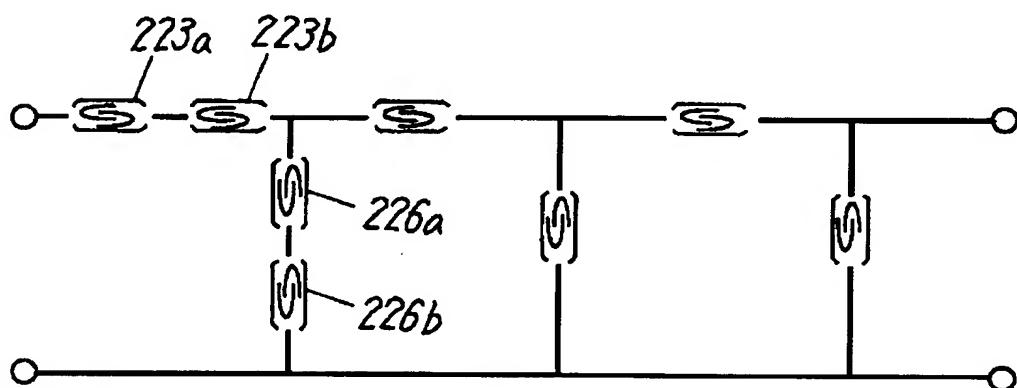


FIG. 23

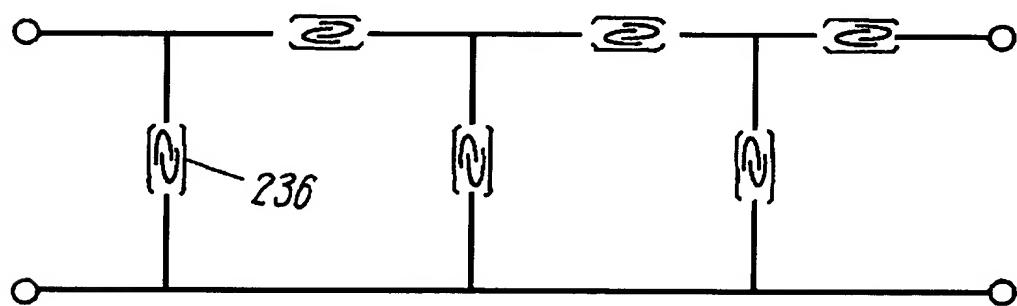


FIG. 24

	SAW Resonator No.	Relative Capacitance								
FIG. 6 Comparative Example 1	63	1	64	1	65	1	66	1	67	1
FIG. 5 Embodiment 1	43	1	44a 44b	2 2	45a 45b	2 2	46	1	47	1
FIG. 9 Comparative Example 2	93	1	94a 94b	2 2	95	1	96	1	97	1
FIG. 10 Comparative Example 3	103a 103b	2 2	104a 104b	2 2	105	1	106	1	107	1

FIG. 25

	Antenna Terminal and Output Terminal Both 50Ω-Terminated		Antenna Terminal Opened, and Output Terminal 50Ω-Terminated	
	Withstand Voltage (dBm)	Deteriorating SAW Resonator No.	Withstand Voltage (dBm)	Deteriorating SAW Resonator No.
FIG. 6 Comparative Example 1	32	64	≤ 30	64
FIG. 5 Embodiment 1	36	44a	33	45b
FIG. 9 Comparative Example 2	33	96	30	96
FIG. 10 Comparative Example 3	33	106	30	106

FIG. 26

	SAW Resonator No.	Relative Capacitance	SAW Resonator No.	Relative Capacitance	SAW Resonator No.	Relative Capacitance	SAW Resonator No.	Relative Capacitance	SAW Resonator No.	Relative Capacitance	SAW Resonator No.	Relative Capacitance
FIG. 17 Comparative Example 5	173	1	174	1	175	1	176	1	177	1		
FIG. 11 Embodiment 2	113a 113b	2 2	114a 114b 114c 114d	4 4 4 4	115a 115b	2 2	116	1	117	1		
FIG. 13 Embodiment 3	133a 133b	2 2	134a 134b 134c 134d	4 4 4 4	135a 135b 135c	3 3 3	136	1	137	1		
FIG. 14 Embodiment 4	143a 143b	2 2	144a 144b 144c 144d	4 4 4 4	145a 145b 145c	3 3 3	146	1	147a 147b	2 2		
FIG. 15 Embodiment 5	153a 153b	2 2	154a 154b 154c 154d	4 4 4 4	155a 155b 155c	3 3 3	156a 156b	2 2	157a 157b	2 2		
FIG. 16 Comparative Example 4	113a 113b	2 2	114a 114b 114c 114d	4 4 4 4	115a 115b	2 2	116	1	117	1		

FIG. 27

		Antenna Terminal 50Ω-Terminated, and Output Terminal 50Ω-Terminated		
		Withstand Voltage (dBm)	Deteriorating SAW Resonator No.	Withstand Voltage (dBm)
FIG. 17 Comparative Example 5	28	174	≤ 27	174
FIG. 11 Embodiment 2	33	113a	30	115b
FIG. 13 Embodiment 3	33	133a	31	137
FIG. 14 Embodiment 4	33	143a	32	134d
FIG. 15 Embodiment 5	33	153a	32	154d
FIG. 16 Comparative Example 4	33	113a	28	115d

FIG. 28

	Antenna Terminal and Output Terminal Both 50Ω-Terminated		Antenna Terminal Opened, and Output Terminal 50Ω-Terminated	
	Withstand Voltage (dBm)	Deteriorating SAW Resonator No.	Withstand Voltage (dBm)	Deteriorating SAW Resonator No.
FIG. 20 Embodiment 6	33	None	30	206
FIG. 21 Embodiment 7	33	None	31	213
FIG. 22 Embodiment 8	33	None	32	226a
FIG. 23 Comparative Example 6	31	236	28	236

FIG. 29

Prior Art

